

1. INTRODUCTION

As we move toward the 21st Century, rural electric cooperatives of every size and type are facing increasing pressure to understand the environmental consequences of their various activities. As a rural electric cooperative, you should care about these consequences for several reasons:

- Your facility's use of PCBs, oils, fuels, paints, solvents, pesticides and herbicides, antifreeze, batteries, and/or other chemicals can impact the environment and your workers.
- The costs of non-compliance with the regulations can be high.
- Alternatives to your current ways of doing business exist that could save you money.

The United States Environmental Protection Agency (EPA) and the National Rural Electric Cooperative Association (NRECA) have worked together to create this manual to address environmental issues associated with the non-power generation activities at rural electric cooperatives. We hope you find this manual useful in helping you understand your environmental obligations and comply with the requirements.

1.1 PURPOSE AND SCOPE

This manual is focused on the smaller distribution cooperatives since larger distribution cooperatives and generation and transmission facilities typically have the resources to employ environmental compliance professionals. However, information presented in this manual applies to all cooperatives, including generation and transmission facilities. Statewide associations also may find much of the information in this manual applicable to their activities so they may advise their members effectively.

USEFUL TIP

Typically, larger facilities have developed position papers and policy manuals on ensuring compliance with environmental regulations, and on pollution prevention. Sometimes these cooperatives are willing to provide environmental compliance and pollution prevention assistance to other cooperatives. If you need information or assistance that is not provided in this document, your statewide association, or larger cooperatives in your state might be useful resources.

This manual is designed to provide you with answers to several important questions including:

- How do I comply with the laws and regulations that apply to my facility?
- What pollution prevention options are available for my facility?
- Where can I get additional information?

1.1.1 Complying with Laws and Regulations that Apply to Cooperatives

Many activities at rural electric cooperatives are governed by Federal, State and/or local laws or regulations because those activities generate solid or hazardous wastes or air emissions, or potentially could harm human health or the environment. It is important for you to be aware of, and comply with, all Federal, State and local regulations applicable to your cooperative's activities. These laws and regulations are complex, and numerous, so this task can be challenging.

USEFUL TIP – REGULATIONS VS. LEGISLATION

The various acts discussed in this document (such as the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, etc.) are pieces of **Federal** legislation enacted by Congress. These acts specify a federal agency (such as the U.S. Environmental Protection Agency, or Department of Transportation) to write **Federal** regulations (i.e., laws) to enforce the requirements specified in the act. The environmental regulations are mostly found in Title 40 of the Code of Federal Regulations (abbreviated as 40 CFR), but may be found in other CFR titles, as well. Within each title, the regulations for each act are contained in sections. Throughout this document, the location of a specific regulation will be indicated by the title of the CFR it is located in, followed by the section number or numbers that contain the regulation (i.e., 40 CFR 50 or 40 CFR 50-95).

The first step you should take to meet this challenge is to identify the operations and activities performed at your facility that are governed by Federal, State or local environmental regulations. Table 1-1 lists the majority of these activities. The next step is for you to determine the waste streams generated by each activity, and the laws and regulations that apply to each operation or activity. Table 1-1 lists potential waste streams generated by the associated activity, but keep in mind that not all waste streams listed in Table 1-1 may be generated by the activity as it is performed at your cooperative. Table 1-1 also lists the Federal regulations that may apply to each activity (there may be more than one). It is beyond the scope of this manual to address all of the State and local

**Table 1-1. Waste Streams, Regulations and Associated Document Section for Activities and Operations at Rural Electric Cooperatives
(regulation acronyms defined at end of table)**

ACTIVITY/OPERATION	APPLICABLE REGULATIONS (1)	POTENTIAL WASTE STREAMS GENERATED (2)	ASSOCIATED SECTION OF DOCUMENT
PCB-Contaminated Equipment Overhaul/Repair	TSCA	PCB Waste Hazardous Waste	2, 3
Waste Management	CERCLA RCRA TSCA CAA	Hazardous Waste Air Emissions	3, 5, 12
Vehicle Maintenance	RCRA CAA	Used Oil Solid Waste Hazardous Waste Air Emissions	3, 5, 12
Office Work	RCRA CWA	Solid Waste Sewage	3, 9
Transportation of Hazardous Wastes and Materials	RCRA DOT	none, unless spills occur	4
Vehicle Fueling/Refueling	CAA CERCLA EPCRA	Hazardous Waste (if spills occur) Air Emissions	5, 6, 12
Storage of Hazardous Substances/Products	EPCRA, OSHA	none	6
Spill/Release Response and Cleanup	CAA EPCRA CWA RCRA CERCLA	Solid Waste Hazardous Waste PCB Waste	3, 7
Wastewater Disposal and/or Treatment	CWA	Hazardous Waste Solid Waste Wastewater	8
Storm Water Management	CWA	Storm Water	8
Drinking Water Management and Treatment	CWA SDWA	none	9
Construction	CWA RCRA	Storm Water Solid Waste	8, 10
Pesticide Application and Management	FIFRA RCRA	Air Emissions Hazardous Waste	3, 5, 11
Open Burning	CAA	Air Emissions	12
Short-term Power Generation (when grid is down)	CAA	Air Emissions	12
Asbestos Abatement	CAA OSHA	Waste Asbestos Solid Waste	13

Notes:

1. Acronym Definitions:

CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CWA	Clean Water Act
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-Know Act
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
OSHA	Occupational Safety and Health Act
RCRA	Resource Conservation and Recovery Act
SDWA	Safe Drinking Water Act
TSCA	Toxic Substances Control Act

2. Your facility may not generate all waste streams listed in this column for the subject activity or operation.

laws and regulations that apply to activities at your cooperative, but it will inform you of the types of State and local regulations that apply. You must contact your State or local regulatory agencies to find out any additional requirements that may apply.

Table 1-1 also will inform you which sections in this manual provide detailed information on how to comply with the regulations and pollution prevention alternatives that could save your cooperative money and time. Use this manual as a starting point, and refer to the Reference sections at the end of each chapter (see Section 1.2) to find out where to get more information on topics presented in the chapter.

1.2 ORGANIZATION

This document consists of thirteen chapters. Chapters two through thirteen each address the regulations and compliance requirements for a specific environmental issue (i.e., PCBs, hazardous waste, managing hazardous products, preparing wastes for transport, spills and emergency response, wastewater, drinking water, wetlands, pesticides, etc.). Each chapter has a references section containing any or all of the following: additional sources of information, tools for compliance (such as checklists), Internet sites, and a references section listing documents that provide more details on the subject area addressed in the chapter. The resources section at the end of this chapter provides addresses and telephone numbers for Regional Offices of the EPA, and state environmental agencies.

1.3 RECOMMENDATIONS FOR POLLUTION PREVENTION TECHNIQUES

Pollution prevention is one of the most cost effective ways to simplify and maintain environmental compliance at your cooperative. Pollution prevention also reduces the potential environmental and human health impacts resulting from your cooperative operations. It can separate a successful cooperative from those burdened with excessive compliance costs and potentially damaging State or Federal fines.

Pollution prevention (sometimes referred to as “P2”), as defined by the U.S. Environmental Protection Agency (EPA), is:

“...the use of materials, processes or practices that reduce or eliminate the generation of pollutants or wastes at the source.”

Simply put, the use of pollution prevention techniques will reduce or eliminate pollution created by a cooperative operation or activity, rather than controlling pollution at the end of the pipe. Producing less waste has many benefits including:

- Decreased waste management costs
- Decreased raw material costs and energy consumption
- Increased compliance and decreased environmental compliance costs (you'll spend less time assuring compliance)
- Decreased environmental liability
- Increased efficiency and productivity
- Increased worker safety
- Excellent cooperative image.

Throughout the manual, important pollution prevention techniques that may potentially improve your cooperative's compliance and environmental performance will be highlighted. Within each chapter, you may find sections containing expanded P2 information and/or tables summarizing pollution prevention techniques and benefits and waste streams affected by the techniques. Only easy and moderately easy P2 opportunities are presented in this manual. Additional information on pollution prevention, including more challenging opportunities and on-site technical assistance is available from your State and/or local environmental agency. Often these services or materials are provided free of charge.

It is important to remember that not every P2 technique will work at every cooperative. You should experiment with pollution prevention techniques to find those that help you meet your P2 goals without adversely affecting your cooperative operations.

1.4 RESOURCES

1.4.1 EPA Regional Offices

Region I (ME, VT, MA, CT, RI)

Environmental Protection Agency
John F. Kennedy Federal Building
Room 2203
Boston, MA 02203-0001
(617) 565-3420

Region II (NY, NJ, Puerto Rico, Virgin Islands)

Environmental Protection Agency
290 Broadway
New York, NY 10007-1866
(212) 637-3000

Region III (DC, DE, MD, PA, VA, WV)

Environmental Protection Agency
841 Chestnut Building
Philadelphia, PA 19107
(215) 566-5000

Region IV (TN, KY, NC, SC, GA, AL, MS, FL)

Environmental Protection Agency
345 Courtland Street, NE
Atlanta, GA 30365
(404) 3437-4727

Region V (IL, WI, IN, MI, MN, OH)

Environmental Protection Agency
77 W. Jackson Boulevard
Chicago, IL 60604-3507
(312) 353-2000

Region VI (NM, TX, OK, AR, LA)

Environmental Protection Agency
First Interstate Bank Tower at Fountain Place
12th Floor/Suite 1200
1445 Ross Avenue
Dallas, TX 75202
(214) 655-6444

Region VII (NE, KS, MO, IA)

Environmental Protection Agency
726 Minnesota Avenue
Kansas City, KS 66101
(913) 551-7000

Region VIII (MT, WY, ND, SD, UT, CO)

Environmental Protection Agency
999 18th Street, Suite 500
Denver, CO 80202-2466
(303) 312-6312

Region IX (CA, NV, AZ, HI, American Samoa, Guam)

Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
(415) 744-1305

Region X (WA, OR, ID, AK)

Environmental Protection Agency
1200 Sixth Avenue
Seattle, WA 98101
(206) 553-1200

1.4.2 State Solid and Hazardous Waste Agencies

Alabama

Department of Environmental Management
Land Division - Solid/Hazardous Waste
1751 Federal Drive
Montgomery, AL 36130
(205) 271-7761/7735

Alaska

Department of Environmental Conservation
Environmental Quality Management Section
Solid Waste Management Section
Pouch O
Juneau, AK 99811
(907) 465-2667

Arizona

Department of Health Services
Office of Waste and Quality Management
2005 N. Central Avenue
Phoenix, AZ 85004
(602) 257-2235

Arkansas

Department of Pollution Control and Ecology
Solid Waste Division
P.O. Box 9583
Little Rock, AR 72219
(501) 562-7444

California

Department of Toxic Substance Control
P.O. Box 806
Sacramento, CA 95812-0806
(916) 322-3700

Colorado

Department of Health
Hazardous Materials and Waste Management
4210 E. 11th Avenue
Denver, CO 80220
(303) 331-4830

Connecticut

Department of Environmental Protection
Division of Environmental Quality
Waste Management Unit
State Office Building
165 Capitol Avenue
Hartford, CT 06106
(203) 566-8476

Delaware

Department of Natural Resources and
Environmental Control
Division of Environmental Control
Solid Waste/Hazardous Waste Section
Edward Tatnall Building
P.O. Box 1401
Dover, DE 19901
(302) 736-7812

Delaware Solid Waste Authority
P.O. Box 71
New Castle, DE 19901
(302) 736-5361

District of Columbia

Public Space Maintenance Administration
Bureau of Sanitation Services
Solid Waste Disposal Division
4701 Shepherd Parkway, SW
Washington, DC 20032
(202) 767-8512

Department of Consumer and Regulatory Affairs
Environmental Control Division
Pesticides and Hazardous Waste Section
5010 Overlook Avenue, SW
Washington, DC 20032
(202) 783-3194

Florida

Department of Environmental Regulation
Division of Environmental Programs
2600 Blairstone Road
Tallahassee, FL 32301
(904) 487-1855

Georgia

Department of Natural Resources
Environmental Protection Division
Land Protection Branch
270 Washington Street, SW
Atlanta, GA 30334
(404) 656-2883

Hawaii

Department of Health
Pollution Investigation and Enforcement Division
P.O. Box 3378
Honolulu, HI 96801
(808) 548-6355

Idaho

Department of Health and Welfare
Division of Environment
Bureau of Hazardous Materials
450 W. State Street
Boise, ID 83720
(208) 334-5879

Illinois

Environmental Protection Agency
Land Pollution Control Division
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276
(217) 782-6762

Indiana

Office of Solid and Hazardous Waste Management
105 S. Meridian
Indianapolis, IN 46206-6015
(317) 232-4473

Iowa

Department of Natural Resources
Environmental Protection Division
Air Quality and Solid Waste Protection Bureau
Wallace State Office Building
900 E. Grand Avenue
Des Moines, IA 50319

Kansas

Department of Health and Environment
Solid Waste Management Division
Forbes AFB Bldg. No. 740
Topeka, KS 66620
(913) 296-1500

Kentucky

Environmental Protection Department
Division of Waste Management
Ft. Boone Plaza
18 Reilly Road
Frankfort, KY 40601
(502) 564-6716

Louisiana

Department of Environmental Quality
Office of Solid and Hazardous Waste
Solid Waste Division
P.O. Box 44307
Baton Rouge, LA 70804
(504) 342-4677

Maine

Department of Environmental Protection
Bureau of Oil & Hazardous Materials Control
State House Station 17
Augusta, ME 04333
(207) 287-7688

Waste Management Agency
State House Station 154
Augusta, ME 04333
(207) 287-5300

Maryland

Department of the Environment
Hazardous and Solid Waste Mgt. Admin.
2500 Broening Avenue
Baltimore, MD 21224
(301) 631-6400

Massachusetts

Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
Solid and Hazardous Waste Division
1 Winter Street
Boston, MA 02108
(617) 292-5589

Michigan

Department of Natural Resources

Hazardous Waste Division
P.O. Box 30028
Lansing, MI 48909
(517) 373-2730

Department of Natural Resources
Ground Water Quality Division-Solid Waste
P.O. Box 30028
Lansing, MI 48909
(517) 373-2794

Minnesota

Minnesota Pollution Control Agency
Solid and Hazardous Waste Division
520 Lafayette Road North
St. Paul, MN 55155
(612) 296-7340

Mississippi

Department of Natural Resources
Bureau of Pollution Control
P.O. Box 10358
Jackson, MS 39209
(601) 961-5171

Missouri

Department of Natural Resources
Division of Environmental Quality
Waste Management Program
Jefferson State Office Building
205 Jackson Street
P.O. Box 176
Missouri Boulevard
Jefferson City, MO 65102
(314) 751-3176

Department of Natural Resources
Division of Environmental Quality
Waste Management Program
Jefferson State Office Building
205 Jefferson Street
P.O. Box 176
Missouri Boulevard
Jefferson City, MO 65102
(314) 751-3176

Montana

Department of Health and Environmental Sciences
Solid Waste Management Bureau
Cogswell Building
Helena, MT 59620
(406) 444-2821

Nebraska

Department of Environmental Control
P.O. Box 94877
State Office Building
Lincoln, NE 68509
(402) 471-2186

Nevada

Department of Conservation and Natural Resources
Division of Environmental Services
Hazardous Waste Bureau/Solid Waste Bureau
Concord, NH 03301
(603) 271-2906
Underground Storage Tanks
(603) 271-3503

New Jersey

Department of Environmental Protection
Solid Waste Division/Hazardous Waste Bureau
401 East State Street
CN402
Trenton, NJ 08625
(609) 292-9120/9877

New Mexico

Health & Environmental Department
Environment Improvement Division
Harold Runnels State Office Bldg.
1190 St. Francis Drive
P.O. Box 968
Santa Fe, NM 87504
(505) 827-2779/2929

New York

Technical Determination Section
Division of Solid and Hazardous Materials
New York Department of Environmental Conservation
50 Wolfe Road, Room 423
Albany, NY 12233
(518) 485-8988

North Carolina

NC Department of Environmental, Health, and Natural Resources
Division of Solid Waste Management/Hazardous Waste Section
P.O. Box 27687
Raleigh, NC 27611
(919) 733-2178

North Dakota

Health Department
Environmental and Waste Management Research Division
1200 Missouri Avenue
Bismark, ND 58505
(701) 224-2382

Ohio

Environmental Protection Agency
Office of Solid and Hazardous Waste
P.O. Box 1049
1800 Watermark Drive
Columbus, OH 43266-0149
(614) 644-2917

Oklahoma

Health Department
Environmental Waste Service
Hazardous Waste Service
P.O. Box 53551
Oklahoma City, OK 73152
(405) 271-5338

Oklahoma Corporation Commission
UST Department
Jim Thorpe Building
Oklahoma City, OK 73109
(405) 521-3107

Oregon

Department of Environmental Quality
Division of Hazardous and Solid Waste
Executive Building
811 SW Sixth Avenue
Portland, OR 97204
(503) 229-5254

Pennsylvania

Department of Environmental Resources
Bureau of Solid Waste Management
Fulton Building
P.O. Box 2063
Harrisburg, PA 17120
(717) 787-9870

Puerto Rico

Environmental Quality Board
Solid and Hazardous Waste Bureau
P.O. Box 11488
Santurce, PR 00910
(809) 725-5140

Rhode Island

Department of Environmental Management
Air and Hazardous Materials
291 Promenade Street
Providence, RI 02908
(401) 277-2797

South Carolina

Board of Health and Environmental Control
Bureau of Solid and Hazardous Waste
2600 Bull Street
Columbia, SC 29201
(803) 734-5200

South Dakota

Department of Water and Natural Resources
Environmental Health Division
Joe Foss Building
Pierre, SD 57501
(605) 773-3329

Tennessee

Department of Public Health
Bureau of Environmental Health Services
Solid Waste Management Division
Cordell Hull Building
Nashville, TN 37129
(615) 741-3424

Texas

Texas Water Commission
P.O. Box 13087
Capitol Station
Austin, TX 78711
(512) 463-7760

Department of Health
Bureau of Solid Waste
1100 W. 49th Street
Austin, TX 78756
(512) 458-7271

Utah

Department of Health Division of Environmental Health
Bureau of Solid and Hazardous Waste
P.O. Box 16690
288 North 1460 West
Salt Lake City, UT 84116-0690
(801) 538-6170

Vermont

Agency of Natural Resources
Waste Management Division
103 S. Main Street
Waterbury, VT 05676
(802) 244-8702

Virginia

Department of Waste Management
101 N. Fourteenth Street
Monroe Building, 11th Floor
Richmond, VA 23219
(804) 225-2667

Washington

Department of Ecology
Solid and Hazardous Waste Program
Mail Stop IV-11
Olympia, WA 98504-8711
(206) 459-6316

West Virginia

Department of Natural Resources
1201 Greenbriar Street
Charleston, WV 25311
(304) 348-5935

Wisconsin

Department of Natural Resources
Bureau of Solid Waste Management
101 S. Webster Street
Madison, WI 53707
(608) 266-1327

Wyoming

Department of Environmental Quality
Solid Waste Management Program
122 W. 25th Street
Cheyenne, WY 82002
(307) 777-7752